insurance if costs per payroll vary by firm size (say due to experience rating). Changing the severity of automobile claims may have a measurably smooth impact on legal fees. In all of these cases total costs are observed, but the distribution of those costs across claim types (the 'hedonic' distribution) is not. We present a general technique for inferring the 'hedonic' distribution in these cases using a variant of the Almon distributed-lag technique. To illustrate its usefulness, we employ it to infer the distribution of premiums across different risk classes of firms. In our example, there appears to be a uniform distribution of dividends across risk groups though firms with lower losses receive relatively more dividends. *Insurance: Mathematics and Economics*, Vol. 8, No. 4 (December 1989), pp. 303–08. (Reprinted with permission of North-Holland Publishing Company).

Delay in Claim Settlement, by P. Boogaert and J. Haezendonck (University of Antwerp).

In reality there is always a time going by between the moment a claim occurs and the moment of settlement (payment) of that claim. Therefore we introduce the settling delay and the liability process within the framework of an economical environment. We study the main mathematical properties of the liability process. Furthermore we consider some examples. *Insurance: Mathematics and Economics*, Vol. 8, No. 4 (December 1989), pp. 321–30. (Reprinted with permission of North-Holland Publishing Company).

Insurance-investment: Diffusion Analysis, by Dominique Page (I.A.E. Aix en Provence, France).

The cumulate income (free reserves) of an insurance company comes from technical and financial results. In this paper we study the variation of these free reserves in two different contexts. Firstly, as in the classical model of risk theory, we assume that the aggregate technical result is given by a process with stationary independent increments, and we describe that the instantaneous rate of return on investment is a Wiener process. Under these assumptions we give the stochastic differential equation of the free reserves. Afterwards, considering that there often exist two distinct decision centers: the technical and the financial departments, we give the free reserves processes perceived by each department. Secondly, we observe if for a portfolio analysis - in which the decision variables are the activities on the different types i of contract - the assumption of increments can be justified. *Insurance: Mathematics and Economics*, Vol. 8, No. 4 (December 1989), pp. 287–302. (Reprinted with permission of North-Holland Publishing Company).

RISK MANAGEMENT PROGRAMS

Optimality and the Government's Risk Management Programs, by Keith Willett (Oklahoma State University).

This paper examines the optimality of the government's risk management programs in the area of environmental policy. A model of risk management for the government is developed under the presumption that the objective of risk management is avoidance of damages from two general classes of pollutants. This model is then used to make direct comparisons between solutions to the government's social-welfare maximization problem and Pareto optimal outcomes. The underlying economic rationale for each of the different outcomes is also discussed. *Managerial and Decision Economics*, Vol. 10, No. 2 (June 1989), pp. 107–13. (Reprinted with permission of the *Journal of Economic Literature*).

SAFETY AND LOSS CONTROL

Risk and Reactor Safety Systems Adoption, by Jeffrey A. Dubin (California Institute of Technology) and Geoffrey S. Rothwell (Stanford University).
How do firms react to the risk of accidents that disable their industrial plant? We examine this question by modeling the electric utility's decision to install reactor safety systems. The optimal adoption time is a function of the probability of a serious accident, the cost of the safety system, potential damages, and insurance premiums. We apply an econometric version of our model to the empirical evidence regarding implementation of a computer graphics warning system for nuclear reactors. We find that (1) firms that operate multiple reactors at one site, have higher equipment failures, or have higher discount rates, were quicker to adopt the safety system; (2) owners of larger plants were slower to adopt; and (3) the size of the population surrounding the plant, the state regulatory climate in which the reactor was operating, and the value of the initial plant investment had no influence on the speed of adoption. *Journal of Econometrics*, Vol. 42, No. 2 (October 1989), pp. 201–18. (Reprinted with permission of North-Holland Publishing Company.)